REMARKS

Claims 2-10, 12-21 and 23-28 are pending in the present application. Claims 7, 8, 9, 23 and 28 are in independent form. Claims 23 and 28 are amended. In view of the above amendments and following remarks, favorable reconsideration and allowance of the present application is respectfully requested.

I. ALLOWABLE SUBJECT MATTER

Applicants appreciate the Examiner's indication that claims 2-10, 12-21 and 23-27 are allowed.

II. CLAIM AMENDMENTS

By the present Amendment, claims 23 and 28 are amended. The amendment to claim 28 is supported, at least, by pages 85-87 of the original Specification. Further, claims 23 and 28 are amended to provide proper antecedent basis with regard to "the water absorbent resin composition." Thus, Applicants submit that the amendments to claims 23 and 28 do not introduce new matter.

III. EXAMPLE EMBODIMENTS

As discussed on pages 85-87 of the Specification, the "water-soluble component" of the water absorbent resin composition according to example embodiments is a value obtained by measuring an amount of the water-soluble component in a water-soluble component extract solution in which the water-soluble component of the water absorbent resin composition is extracted. The water-soluble component extract solution is prepared by adding the water absorbent resin composition to a saline and stirring the mixture.

Furthermore, example embodiments in the present application teach that when the amount of the water-soluble component exceeds 35 wt %, the water-soluble component of the particulate water absorbent resin elutes at the time of water absorption. As a result, the water-soluble component functions like a binder between particles in the particulate water absorbent resin, so that the gel blocking tends to occur.

Further, in an objective of example embodiments in the present application is to provide a water absorbent resin, which includes both a superior absorbent property and a superior moisture absorption blocking property, that suppresses clumping of particles in high humidity. The inventors of the present application found that it is possible to achieve this objective only after (i) providing a water absorption resin having a specific cross-linking structure, and (ii) arranging both a particle size distribution and an extraction rate of a multivalent metal component.

IV. CITED ART REJECTION

Claim 28 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Mertens et al. (hereinafter "Mertens"), International Publication No. WO 00/53644, in view of Nakashima et al. (hereinafter "Nakashima"), U.S. Publication No. 2004/0106745 A1. Applicants respectfully traverse the rejection.

Amended independent claim 28 is directed to a water absorbent resin composition including (*inter alia*) "a logarithmic standard deviation ($\sigma\zeta$) of a particle size distribution of the water absorbent resin composition is 0.45 or less" and "a water-soluble component of the water absorbent resin composition is 35 wt % or less, the water-soluble component being a value obtained by measuring an amount of the water-soluble component in a water-soluble component extract solution in which the water-soluble component of the water

absorbent resin composition is extracted, the water-soluble component extract solution being prepared by adding the water absorbent resin composition to a saline and stirring the mixture thus obtained." Applicants submit that Mertens in view of Nakashima fails to explicitly teach, or otherwise suggest, the above features recited in amended independent claim 28.

First, the rejection states that "[f]rom 0 to 30 wt% of water-soluble polymer is included as water-soluble polymer (col. 5, line 49-51) which reads on water-soluble component of 35 wt% or less in instant claim." Action, p. 3. Thus, the Examiner asserts that the "water-soluble polymer" disclosed in Mertens reads on the "water-soluble component" recited in claim 28.

However, the examples of the water-soluble polymer products disclosed in Mertens ("...such as partially or completely saponified poly(vinyl alcohol), polyvinylpyrrolidone, starch or starch derivatives, polyglycols or poly (acrylic acids)...") are different from the "water-soluble component" of the water absorbent resin composition recited in claim 28.

Namely, the weight percentages of the water-soluble polymer products disclosed in Mertens are not "a value obtained by measuring an amount of the water-soluble component in a water-soluble component extract solution in which the water-soluble component of the water absorbent resin composition is extracted, the water-soluble component extract solution being prepared by adding the water absorbent resin composition to a saline and stirring the mixture thus obtained" as recited in amended claim 28.

Even when 0 to 30 wt.-% of the water –soluble polymer products is included in the water-soluble polymer as taught by Mertens, the value obtained by measuring the amount of the water-soluble component in the water-soluble component extract solution is not necessarily "35 wt % or less" as recited in claim 28.

Mertens does not recognize the critically of a water-soluble component of the water absorbent composition being "35 wt % or less" as recited in claim 28.

Applicants kindly remind the Examiner of MPEP 2144.05(II)(A), which states that "[g]enerally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art **unless there is evidence indicating such concentration or temperature is critical**." Emphasis added.

Secondly, the rejection states that "[w]ith respect to the logarithmic standard deviation, given that particle diameter of water absorbent resin ranges from 150 μm to 850 μm in Mertens et al, Nakashima et al and instant claims, and the average particle diameter in Nakashima et al, overlaps with instantly claimed average particle diameter of 300 to 500 μm, reasonable basis exists for one skilled in the art to expect the logarithmic standard deviation of the particle size distribution of the water absorbent resin composition, of Mertens et al in view of Nakashima et al, to be 0.45 or less as in [the] instant [claim]." Action, p. 4-5 (emphasis added).

However, as acknowledged by the Examiner on page 4, lines 7-11 of the Action, Nakashima teaches that the water absorbing agent includes at least two kinds of particles selected from "...particles (A1) having particle diameters of smaller than 850 μm but not smaller than 600 μm; particles (A2) having particle diameters of smaller than 600 μm but not smaller than 500 μm; particles (A3) having particle diameters of smaller than 500 μm but not smaller than 300 μm; and particles (A4) having particle diameters of smaller than 300 μm but not smaller than 150 μm." Nakashima, paragraph [0136]. In other words, Nakashima teaches that particles having a size less than 850 μm and not less than 150 μm are classified as one of four kinds of particles (namely, (A1), (A2), (A4) and (A4)) according to the range of their particle size. Furthermore,

Nakashima teaches that the water-absorbing agent includes at least two kinds of particles selected from the four kinds of particles.

Even if the weight average particle diameter ranges from 300 μm to 500 μm as claimed, the particle size distribution changes depending on what kinds of particles are selected from among the four kinds of particles, thereby resulting in a change in the logarithmic standard deviation. Nakashima does not even recognize that the logarithmic standard deviation is a result-effective variable.

Applicants remind the Examiner of MPEP §2144.05(II)(B), which states that "[a] particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)..."

Furthermore, both Mertens and Nakashima merely disclose improving the absorbent property or improving balance. However, neither Mertens nor Nakashima suggests improving a moisture absorption blocking property, or simultaneously improving both the absorbent property and a moisture absorption blocking property.

"Presence of a property not possessed by the prior art is evidence of nonobviousness." MPEP §716.02(a)(III).

In view of the above, Applicants submit that it would require a great deal of trial and error and thus would be difficult even for one having ordinary skill in the art to conceive of the water absorbent resin composition recited in claim 28 where "a logarithmic standard deviation ($\sigma\zeta$) of a particle size distribution of the water absorbent resin composition is 0.45 or less" based on the varying logarithmic standard deviation that may be obtained given the numerous

possible combinations of particles (namely, the combinations of particles (A1), (A2), (A4) and (A4)) disclosed in Nakashima for the purpose of improving both the absorbent property and the moisture absorption blocking property (an objective not disclosed in Mertens or Nakashima), absent inappropriate hindsight of the Applicants' own disclosure.

For at least these reasons, Applicants submit that Mertens in view of Nakashima fails to explicitly teach, or otherwise suggest, a water absorbent resin composition including "a logarithmic standard deviation ($\sigma\zeta$) of a particle size distribution of the water absorbent resin composition is 0.45 or less" and "a water-soluble component of the water absorbent resin composition is 35 wt % or less, the water-soluble component being a value obtained by measuring an amount of the water-soluble component in a water-soluble component extract solution in which the water-soluble component of the water absorbent resin composition is extracted, the water-soluble component extract solution being prepared by adding the water absorbent resin composition to a saline and stirring the mixture thus obtained" as recited in amended independent claim 28.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the §103(a) rejection to independent claim 28.

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CONCLUSION

Accordingly, in view of the above, reconsideration of the rejections and allowance of pending claims 2-10, 12-21 and 23-28 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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